

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/816,381

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A process for recovering disturbed, digital optical signals,
comprising:
converting the disturbed optical signals ~~are opto-electrically,~~ to disturbed electrical
signals;
passing the disturbed electrical ~~, disturbed~~ signals through a feedback decision
circuit comprising at least two parallel-connected threshold decision elements; to obtain decided
signals;
using the decided signals and an estimated dispersion ~~as the basis for the~~
~~synthesisation or~~ to generate synthetic, dispersive signals;
generating an error signal with the disturbed signals and the synthetic, dispersive
signals ~~are used,~~ and
~~using the error signal to derive~~ deriving the setting parameters for setting the
threshold decision elements in accordance with at least said error signal.
2. (Original) A process according to Claim 1, characterised in that the analogue
control stage determines the error signal (10) in accordance with an analogue procedure.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/816,381

3. (Currently Amended) A process according to Claim 1, characterised in that the analogue control stage operates using ~~the~~a zero-forcing algorithm.

4. (Original) A process according to Claim 1, characterised in that a pseudo-error monitor compares the disturbed optical signal with the decided signal and determines a pseudo-error therefrom.

5. (Currently amended) A feedback decision circuit with an input for optically transmitted data reconverted into electronic signals, with at least two parallel-connected threshold decision elements, and with an analogue control stage for determining setting parameters for the threshold decision elements,

characterised in that tappings are provided for deriving the disturbed signal and the decided signal, and that the analogue control stage contains a circuit) for determining a synthetic, dispersive signal, and that the synthetic dispersive signal and the disturbed signal are fed to a circuit for determining an error signal and to a circuit for determining at least two of said setting parameters.

6. (Currently amended) A feedback decision circuit with an analogue control stage according to Claim 5, characterised in that the feedback decision circuit with analogue control ~~stage~~is-stage is connected to a linear equalizer.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No. 09/816,381

7. (Original) A feedback decision circuit according to Claim 6, characterised in that the linear equalizer standardizes the signal amplitude to 1 and the analogue control stage is reduced to the derivation of the parameter B1.

8. (Original) A feedback decision circuit according to Claim 5 with a pseudo-error monitor consisting of a monitor decision element, an EXOR-circuit and a logic circuit.